Contesting

PHOTO 1: Multi-2 station at PZ5V.

PHOTO 2: Mulit-multi station at TZ5A.

This month we consider contest categories and how to enter contests.

Choosing the 'right fit' category for you and your station can bring the best results and maximum fun by playing to your strengths. Thankfully, most contests have multiple entry categories. With careful selection you may be surprised what you can achieve – even from a suburban station with wire antennas. The trick is finding the right category for you and your station.

Before doing anything, think about your objectives. Typical objectives might be to: improve your operating skills, test your station and antennas, beat your own score from the previous contest, give points to other stations, challenge your friends or other club members, or to try to beat a particular station.

A desire to improve and a competitive spirit draw most people to contesting. Beware, it can be addictive! However, before participating in any contest, always read the rules.

QRP, low-power and high-power categories

Most world-wide contests have three separate power categories eg high power (legal limit), low power (100W) or QRP (5 or 10W). These can vary between contests so always check the rules and consider the challenges. By way of example, the Oceania DX Contest would be very challenging from the UK with low power, never mind QRP, however you may be surprised if you give it a try. Contests attract many large stations all wanting your contact, so don't shy away from trying. The All-Asia Contest has only a 'high power' category for non-Asian stations – this does not preclude entries at lower power levels, so you could treat the contest as a fun adventure rather than a competitive one.

Domestic contests tend to have only low power and QRP categories, hence the RSGB Affiliated Societies and Club Championships events on the 80m band provide a relatively level playing field for contesting newcomers to improve their operating skills and antenna systems in relatively short but frequent events.

If you fancy a competitive entry in a DX contest, think carefully about which power category will suit you best. Look at previous results and determine how others have previously faired – you may find a band and power category where you can challenge a previous record.

Assisted and unassisted entries

Assistance in a contest can take many forms eg chat rooms, internet sites (eg RBN or DX Watch), packet or DX Cluster, local skimmer receiver, CW decoder, social media, friends helping – anything that helps the operator to identify and locate stations. An *unassisted* entry is where the operator finds and identifies stations without any external help. Before participating in a contest, ascertain the assistance options, choose your assistance category and declare it when submitting your log after the contest. In many contests, self-spotting on the DX cluster is frowned upon, however some contests are now starting to allow it – check the rules.

Opinions vary about assistance. Some operators prefer to tune the dial and find stations themselves. Others are happy picking stations off the DX Cluster or using CW skimmer-type technology to achieve higher contact rates. Beware the quality of data on the DX cluster – callsigns are often 'busted' (spotted incorrectly) either deliberately or in error. Always listen and check the received callsign before logging – make sure you have it correct.

Single operator categories

Most contesters will opt for one of the 'single operator' categories where one operator performs all operating and logging.

Single-band

Operations will be on one band only. Only one transmitted signal is permitted at any time; alternate CQs on two or more different frequencies are not usually permitted (check the rules).

This category can be for the time-constrained contester, or a 'band specialist' with antenna(s) set up specifically for the band. When conditions are good, single-band entries are particularly popular because they lighten the work-load – most bands have dead periods during a 24-hour period that provide an opportunity to sleep, eat or maintain domestic harmony.

All-band

There is usually no limit on band changes. Alternate CQs on two different bands are permitted but there must only be one transmitted signal at a time (this is known as 'Single Operator Two Radio' – SO2R operating).

The Single-Op All-Band categories are usually where the 'big guns' and experienced, serious contesters can be found at play. As such, they are very competitive and challenging categories, however that should not put anyone off from trying them, whatever their contesting level. You don't have to operate the full duration of the contest but, being able to make QSOs on any band can

add to the experience and is often a great way of working new DX.

Before choosing single-band or all-bands, think about your objectives; if you want to submit a serious entry then consider:

a) how much time you have available and whether a single-band entry will align well with your availability. Remember that LF bands tend to be open after darkness and HF bands during daylight.

b) commitment – serious all-band entrants will operate for the maximum permitted duration of the contest with little or no sleep, do you want to be with them?

c) current propagation conditions – which bands are playing well, and which will be challenging? When will bands be open to target QSO areas?

d) points per QSO – some contests offer higher points on lower bands.

e) availability of multipliers – think about where and when multipliers will be available on each band.

f) your antenna(s) – play to your strengths. Do you get better results on particular band(s)?

Try looking at:

a) all-time score records from your DXCC entity or zone. See if a record is achievable. It can sometimes be surprising to see very achievable targets in some categories.

b) Previous entrants in your category from your DXCC entity – see what they have achieved and consider if you can challenge it.

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Multi-operator categories

The multi-operator contest categories are usually 'all-bands' and allow more than one person to contribute to the final score. The contest category defines the permitted power output, the number of simultaneous transmitted signals or number of locations permitted. All the multi-op categories require great preparation and teamwork to be successful.

Operating as a team can be great fun and an opportunity to share experiences. Usually there will be a station host whose home station and equipment the team uses. At other times the team may set up field-day style. Team entries are often a chance to use different (sometimes better) equipment and antennas than you have at home.

Once you've started to demonstrate a history of contest entries, how do you get invited on to a multi-op team? Either start one yourself by finding like-minded people or build friendships with multi-op station hosts at DX and contesting conventions or online discussion groups. The RSGB Contest Club and GR2HQ team may also offer opportunities.

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********** Summary **********

   1320 Raw    QSO before checking (does not include duplicates or missing exchanges)
   1293 Final  QSO after  checking reductions

   3121 Raw    QSO points
   3030 Final  QSO points

    743 Raw    mults
    734 Final  mults

2318903 Raw    score
2224020 Final  score

   2.8% error rate based on raw and final qso counts
   4.1% score reduction
      2  (0.2%) not in log
      8  (0.6%) incorrect calls
     17  (1.3%) incorrect exchanges
      0  (0.0%) missing exchanges
      3  (0.2%) duplicates removed
      0  (0.0%) calls unique to this log only (not removed)
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PHOTO 3: Example of a UBN report.

Single-transmitter (multi-one)

There is no limit on the number of operators or radios but only one transmitted signal is permitted at any time. A typical setup is a 'run' operator on one band while other team members will listen to radios tuned to other bands, building a list of stations on the band map. When the nod is given, control is given to another band/op to either run or search and pounce through the band map.

Two-transmitter (multi-two)

There is no limit on the number of operators or radios but a maximum of two transmitted signals is permitted at any time on two different bands – the log must indicate which transmitter has made each QSO. If the contest requires serial numbers to be issued, check the rules carefully – mix-ups can result in duplicate serial numbers being sent out, though contesting software will reduce this risk. Typically, there will be two 'run' stations and other team members will listen to other bands while building band maps ready for a QSY from the run station. **Photo 1** shows a M/2 station at PZ5A.

Multi-Transmitter (multi-multi)

There is no limit on the number of operators or radios, and one transmit signal is allowed on every eligible band. This usually means at least one radio and one 'run' operator per band and additional operators and radios will be used to listen for multipliers across each band. To work the multipliers, either the 'run' operator will stand by while the 'spotter' works them, or the 'run' operator will temporarily QSY to work them. In all multi-op categories, when switching from one operator (radio) to another on the same band, a PTT lockout is usually used to ensure only a single transmitted signal. **Photo 2** shows a M/M station at TZ5A.

Checklog

A '*checklog*' is entered so that the contest adjudicators can validate QSOs that you made with other entrants. It will not have a published score. Consider entering a checklog if your operating did not meet the rules of the contest. This should only be a last resort compared to a 'proper' entry.

Submitting your log

Usually, logs are uploaded on the contest website in Cabrillo format, though some U/VHF contests require EDI format. Don't worry, the logging software will provide the correct format for you.

It's important to ensure logs are uploaded before the deadline (see rules) and the web form is completed accurately to reflect your entry category, power, level of assistance, etc.

After submission, you will receive a confirmation email from the contest 'robot'. Make sure the entry is accepted and there are no errors. The next email you receive will be your UBN report.

Log Check Report

After the contest has been adjudicated, you should receive a Log Check Report, often referred to as a 'UBN Report'. It is a report showing your final score and an explanation of where points were deducted, or penalties applied.

Typically, the report will show a scores summary, unique callsigns in your log (U), incorrect or 'busted' callsigns in your log (B), callsigns not in your log but claiming to have worked you (N) plus a host of other information. They provide a great basis for self-improvement, areas to work on for next time. **Photo 3** shows part of a Log Check Report.

Contest results and history

Most contest entrants know they won't win – their motivation is simply to improve and gain a better score than their previous entries. Operator ability, antenna performance, decision making (eg run versus search and pounce, knowing when to move band) all contribute towards the score. Being able to plot scores from the same contest and category over time can serve as a measure of improvement. It is most uplifting when things go right. Of course, there are many other variables contributing to a contest score – propagation, activity levels, local QRN etc, which can be blamed when things don't go right! Contest websites have pages dedicated to result archives and many have score records broken down geographically and by category too.

Useful resources

[1] RSGB HF Contests: https://www.rsgbcc.org/hf/
[2] RSGB V/UHF Contests: https://www.rsgbcc.org/vhf/
[3] UKEI Contest Club Contests: https://ukeicc.com/
[4] CQ WW Contest: https://cqww.com/
[5] CQ WPX Contest: https://cqwpx.com/

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